

## Case Study #5—Radio Telephone Systems

### The Requirement:

A Radio Telephone system spanning 800 miles of pipeline requires assessment and upgrade. The existing infrastructure will soon be non compliant (i.e. it is using 25 kHz spacing) and is providing coverage to approximately 90% of the line. It has been in service since the early 1970s and consists of old and non-supported equipment.

### The Solution:

An assessment of the existing equipment was completed and optimal solutions provided. The chosen solution provided 100% coverage along the 800 miles of pipeline and provided full compliancy. The system was made to be more user friendly by providing the ability to call anyone on the radio system or on the telephone network, the ability to locate people, and Emergency calling capability.

Among other components, the upgraded system consists of:

- 25 compliant mountain top VHF Repeaters (some of which are relocated low land locations)
- VHF mobile and UHF handheld subscriber stations
- Network remote controls & dispatch consoles
- Network Switching system

